

Title (en)

Rotary hydraulic distributor for a servo mechanism.

Title (de)

Rotationshydraulischer Verteiler für Servomechanismus.

Title (fr)

Distributeur hydraulique rotatif pour servomécanisme.

Publication

EP 0187591 A1 19860716 (FR)

Application

EP 85402531 A 19851218

Priority

FR 8500369 A 19850111

Abstract (en)

1. A rotary hydraulic distributor for a servomechanism, particularly for a vehicle servosteering system, comprising : - an outer cylindrical distributor component (3) mounted so as to rotate in a bore (2) of a casing (1) ; - an inner cylindrical distributor component (10) mounted in an internal bore (9) of the outer distributor component (3) and capable of limited rotation relative to the latter each side of a relative neutral position ; the distributor components incorporating openings and cavities which mutually define a fluid circulation circuit capable of being connected between a source of fluid under pressure (5) and a reservoir (15) and including fluid passages with variable cross-sections (σ , s) so as to supply selectively the opposing chambers (V1 , V2) of a hydraulic actuator (8) with fluid under pressure, the inner distributor component (10) incorporating at its periphery longitudinal grooves (16) which are angularly spaced, the outer distributor component (3) incorporating inlet through holes (171 , 172) and return openings (181 , 182) opening respectively facing smooth bearing surfaces of the inner distributor component (10) between two adjacent longitudinal grooves (16), and distribution through holes (19, 20) normally communicating with corresponding grooves among the longitudinal grooves (16) of the inner distributor component (10), characterized in that the return openings (181 , 182) are offset longitudinal and angularly from the inlet holes (171 , 172) certain first openings (182) among these return openings communicating permanently with an annular chamber (24) at the end of the outer distributor component (3) bounded internally by the inner distributor component (10), via return passages (26) defined as least partially within the outer distributor component (3).

Abstract (fr)

L'élément de distributeur externe (3) comprend, décalés longitudinalement et angulairement des orifices d'entrée (172), des évidements de retour percés dans une extrémité amincie (30) de l'élément de distributeur externe et coiffés par un capuchon (22) ménageant une chambre annulaire intérieure (24) communiquant, par des passages axiaux (26) avec les évidements de retour (182) et, via un passage radial (27), avec le passage longitudinal central de retour (12) de l'élément de distributeur interne (10).

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F16K 11/085 (2006.01); **B62D 5/083** (2006.01)

CPC (source: EP)

B62D 5/083 (2013.01)

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